

## Department of Energy

## §431.106

requiring insulation, those areas of a storage tank, including hand holes and manholes, in its uninsulated or pre-insulated state, that do not have pipe penetrations or tank supports attached.

*Thermal efficiency* for an instantaneous water heater, a storage water heater or a hot water supply boiler means the ratio of the heat transferred to the water flowing through the water heater to the amount of energy consumed by the water heater as measured during the thermal efficiency test procedure prescribed in this subpart.

*Unfired hot water storage tank* means a tank used to store water that is heated externally, and that is industrial equipment.

### TEST PROCEDURES

#### §431.105 Materials incorporated by reference.

(a) The Department incorporates by reference the following test procedures into Subpart G of Part 431. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Any subsequent amendment to this material by the standard-setting organization will not affect the Department test procedures unless and until the Department amends its test procedures. The Department incorporates the material as it exists on the date of the approval and a notice of any change in the material will be published in the FEDERAL REGISTER.

(b) *Test procedure incorporated by reference.* American National Standards Institute (ANSI) Standard: "Gas Water Heaters, Volume III, Storage Water Heaters with Input Ratings above 75,000 Btu per Hour, Circulating and Instantaneous, Z21.10.3-1998, CSA 4.3-M98, and its Addenda, ANSI Z21.10.3a-2000, CSA 4.3a-M00," IBR approved for §431.105. The Department is incorporating by reference the "Method of Test" subsections of sections 2.9 and 2.10 in ANSI Z21.10.3-1998, CSA 4.3-M98, and the sections referenced there, including sections 2.1.7, 2.3.3, 2.3.4, 2.30 and Figure 3.

(c) *Availability of references*—(1) *Inspection of test procedures.* The test pro-

cedures incorporated by reference are available for inspection at:

(i) National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(ii) U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Hearings and Dockets, "Test Procedures and Efficiency Standards for Commercial Water Heaters, Hot Water Supply Boilers, and Unfired Hot Water Storage Tanks," Docket No. EE-RM/TP-99-480, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585.

(2) *Obtaining copies of Standards.* Anyone can purchase a copy of the standard incorporated by reference from Global Engineering Documents, 15 Inverness Way West, Englewood, CO 80112, or <http://global.ihs.com/>, or <http://webstore.ansi.org/ansidocstore/>.

(d) *Reference standards*—(1) *General.* The standards listed in this paragraph are referred to in the Department test procedures in this subpart, but they are not incorporated by reference. These sources are given here for information and guidance.

(2) *List of References.* (i) ASTM Standard Test Method C518-91, "Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus."

(ii) ASTM Standard Test Method C177-97, "Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus."

(iii) ASTM Standard Test Method D2156-80, "Method for Smoke Density in Flue Gases from Burning Distillate Fuels."

#### §431.106 Uniform test method for the measurement of energy efficiency of commercial water heaters and hot water supply boilers (other than commercial heat pump water heaters).

(a) *Scope.* This section covers the test procedures you must follow if, pursuant to EPCA, you are measuring the